



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of Satoru NIPPA

Serial No. : 09/708,519

Group Art Unit: 1714

Filed: November 9, 2000

Examiner: Callie E. Shosho

For: RESIN COMPOSITE AND METHOD FOR PRODUCING THE SAME

DECLARATION UNDER 37 C.F.R. 1.132

Honorable Commissioner of Patents and Trademarks

Washington, D.C. 20231

Sir:

I, Kazuki TAKEMURA, a Japanese citizen residing at 7-14, Hoshigoe-cho, Niihama-shi, Ehime, Japan, declare:

That I received a Master Degree from the Graduate School of Osaka University, Department of Engineering in March 1993, and entered Sumitomo Chemical Company Limited in April, 1993, in which company I have since then been engaged in research for technology of inorganic material;

That I am familiar with the prosecution history of the above-identified application;

That the following experiment was conducted by me or under my direction.

### Object of the Experiment

The object of the present experiment is to show that a non-kneaded resin composite obtained by a process of mixing an aluminum hydroxide with PTFE emulsion, which is reckoned as being disclosed by Yamada '553, is different from the resin composite having an  $Y/X$  of 0.1 or less as claimed in the present application.

### Experiment 1

6 g(13 parts) of aluminum hydroxide powder having crystalline structure of boehmite and average primary-particle diameter of 13nm, obtained by hydrolysis of aluminum alkoxide was mixed with 4.2g(9 parts) of PTFE emulsion (trade name: PTFE 30J, PTFE content: 60 %, manufactured by Dupont-Mitsui Fluorochemicals Co., Ltd) in a vessel for 10 minutes, and then dried at 100°C to obtain a mixture.

The mixture was mixed for 4 minutes at 100 °C with 41g (87 parts) of styrene-butadiene rubber (trade name: HS-1, manufactured by Sumitomo Chemical Co.,Ltd.), 0.6 g of zinc oxide, 0.6 g of stearic acid, 0.45 g of an age resistor (trade name: Antigene 3C, manufactured by Sumitomo Chemical Co., Ltd.), and 0.45 g of wax (trade name: SUNNOC-N, manufactured by Ouchi-Shinko Chemical Industrial Co., Ltd.), and then mixed for 3.5 minutes at 50 °C with 0.3 g of a vulcanization accelerator (trade name: Soxinol CZ, manufactured by Sumitomo Chemical Co., Ltd.), 0.3 g of a vulcanization accelerator (trade name: Soxinol D, manufactured by Sumitomo Chemical Co., Ltd.) and 0.42 g of sulfur.

The resultant was subjected to vulcanization molding for 20 minutes by using a 160°C hot press to obtain a resin composite.

Using the obtained resin composite, an index  $Y/X$  (in page 15 lines 17-25 of the present specification) was measured. The resin composite had an index of 0.197.

It was recognized that, the resin composite utilized in Experiment 1 does not have an index  $Y/X$  of 0.1 or less.

I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above identified application or patent issued thereon.

Date: March 29, 2005

Kazuki Takemura  
Kazuki TAKEMURA